

DESCRIPTIONS OF SIX NEW SPECIES OF LAND SHELLS FROM  
SOUTH AFRICA.

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PLATE XVI.

IN 1897 Messrs. Melvill & Ponsonby described the first *Curvella* found in South Africa under the name *Hapalus cataractæ*.<sup>1</sup> Since that date the same authors have differentiated three other species—*globosa*,<sup>2</sup> *sinuosa*,<sup>3</sup> and *caloglypta*.<sup>4</sup> In the present paper descriptions of four species of *Curvella*, one of *Ena*, and one of *Obeliscus* are given.

I am indebted to Mr. Ponsonby for kindly entrusting me with such of the specimens as were sent to him for determination, and for assisting me in their diagnosis.

*ENA* (PACHNODUS) McBEANIANA, n.sp. Pl. XVI, Figs. 1, 2.

Shell pyramidal, horn-coloured, opaque, deeply and rather widely umbilicate, thin, shining; with  $6\frac{1}{2}$  whorls, rather ventricose, becoming flatter towards the apex, impressed at the sutures, all clearly, finely, obliquely striate, except the first  $2\frac{1}{4}$ , which are smooth; body-whorl half the length of the shell; aperture nearly round, slightly oblique, with thin simple peristome, the columella margin of which is thickened and triangularly reflexed over the umbilicus, which it partly hides; columella, and thin callus connecting the extremities of the peristome, pale, growing whitish in places.

Long. 15, lat. 12.5 mm.

*Hab.*—Pretoria, Transvaal (J. McBean). Several specimens.

The absence of a keel on the periphery will easily distinguish this species from some of its nearest allies; and the obliquity of its aperture, unaccompanied by any expansion of the labrum, will as readily prevent its being confounded with others. The tendency of the epidermis to peel off in patches is unusual in the group, as is also the opaque, light brownish gray shell exposed in those patches, most of its allies having semitranslucent shells.

*CURVELLA* CROSLYI, n.sp. Pl. XVI, Figs. 3, 4.

Shell imperforate, fusiform, white, thin, shining; with 6 whorls, the last 3 being more ventricose than the others, slightly impressed at the sutures, irregularly ornamented with curved, transverse striæ, which are crossed by a great number of regular, microscopic, spiral striæ, the last whorl being less than the spire; aperture ovate; labrum thin, simple, well arched forward in the middle, labium thickened and thrown back, quite covering and closing the umbilicus; columella slightly curved obliquely to the left; callus scar extending from the

<sup>1</sup> Ann. Nat. Hist., vol. xix (1897), p. 635, pl. xvii, fig. 4.

<sup>2</sup> Ibid., vol. ii (1898), p. 128, pl. vii, fig. 6.

<sup>3</sup> Ibid., vol. iv (1899), p. 198, pl. iii, fig. 12.

<sup>4</sup> Ibid., vol. viii (1901), p. 320, pl. ii, fig. 12.

suture well above the columella, and completely covering the umbilical region.

Long. 12, lat. 5.2 mm.

*Hab.*—Makowe, Zululand, Natal (J. Crosly).

This beautiful shell is much the largest of the South African *Curvellæ* yet discovered, and I have much pleasure in naming it after the discoverer, Mr. J. Crosly.

It is a thin, white, shining shell of six whorls, of which the three last are rather ventricose, and the three upper flatter. The irregular transverse sculpture, following the line of growth, which, like the outer lip, is well curved forward, is easily seen with a weak lens; while the fine spiral sculpture is only visible under a strong magnifier.

With the type are four 'dead' specimens, probably not quite mature, the largest measuring only 10.5 mm. in length, in which the umbilicus is open and the callus not well developed, but in other respects they agree with the type. I have also before me two of the calcareous eggs which were syringed from the shell; they are white, nearly spherical, and measure about 1.3 mm. in diameter.

*CURVELLA STRAMINEA*, n.sp. Pl. XVI, Figs. 5, 6.

Shell oblong-ovate, umbilicate, thin, shining, straw-coloured, sub-translucent; with  $5\frac{1}{2}$  rather ventricose whorls, impressed at the sutures, ornamented with close, clear, fine, arched, transverse striæ; aperture oval; peristome thin, simple, triangularly reflexed over the narrow umbilicus; columella and callus white, the former being slightly curved inwards at the base.

Long. 6.5, lat. 2.75 mm.

*Hab.*—Walmer, near Port Elizabeth, Cape Colony (Miss Hickey). Several specimens.

This pretty little species is more elongate and slender than its South African allies, and is conspicuous by its straw colour and distinct sculpture, which follows the arcuate contour of the outer lip.

*CURVELLA SUCCINEA*, n.sp. Pl. XVI, Figs. 7, 8.

Shell oblong-ovate, narrowly umbilicate, pale horn colour, thin, shining, translucent; with  $5\frac{1}{2}$  slightly ventricose whorls; not much impressed at the sutures, nearly smooth, with faint, and very slightly curved, transverse sculpture crossed with very close, microscopic, spiral striæ; apex rather blunt; aperture oval, about one-third of the length of the whole shell; peristome thin, simple, reflexed, and entire, covering, but not closing, the umbilicus; columella and callus pale straw colour.

Long. 5.75, lat. 2.5 mm.

*Hab.*—Maeström Forest, Bedford, Cape Colony (J. Farquhar).

This delicate little shell, though much resembling in general appearance the last species described (*C. straminea*), is easily distinguished from it by its smaller size, richer colour, smoother surface, less ventricose whorls, and shallower sutures, while the fine, microscopic, spiral striæ, only to be seen with the aid of a strong lens, are not traceable in *C. straminea*, and the characteristic arch of the outer lip is not so pronounced in this as in the last-named species.

## CURVELLA ELEVATA, n.sp. Pl. XVI, Figs. 10, 11.

Shell elongate-conic, umbilicate, pale ashy straw-colour, thin, shining, translucent; with 6 slightly ventricose whorls, not much impressed at the sutures, the apex being blunt, and the last whorl 2.5 mm. of the length of the shell, very finely, irregularly sculptured with curved, transverse striae, with traces of microscopic spiral lines; aperture oval, small; labrum thin, simple; labium triangularly reflexed over the umbilicus; columella paler, nearly straight, slightly bent to the left.

Long. 6.5, lat. 3 mm.

*Hab.*—Grahamstown, Cape Colony (J. Farquhar).

Broader at the periphery, which is situate lower on the body-whorl, and with straighter sides, and therefore of more pyramidal outline, this shell is more elegant in form than either of the preceding allied species, *C. straminea* and *C. succinea*, from which it is easily distinguished.

## OBELISCUS NATALENSIS, n.sp. Pl. XVI, Fig. 9.

Shell elongate, attenuate above, very narrowly umbilicate, thin, yellowish white, shining, subtranslucent; with  $9\frac{1}{2}$  rather ventricose whorls, the last being one-third of the whole length of the shell, and all, except the first two apical whorls, being ornamented with close, fine, sharp, curved, transverse liræ, the apical whorls being smooth, and the apex itself obtuse; aperture ovate; outer lip very thin, simple, arched forward rather above the middle, and receding towards the base; inner lip rolled closely back over the columella, which is arcuate.

Long. 21.5, lat. 6.75 mm.

*Hab.*—Umbogintwini, near Durban, Natal (Burnup).

The close lirate sculpture, which gives the whole shell a soft, silky appearance, readily distinguishes this species from *O. lanceolatus* (Pfr.), which is the nearest South African ally known. In the type, the exceedingly thin labrum is slightly broken away at the base, for which due allowance has been made in the measurements given. On the parietal wall the sculpture is almost obliterated by the beginning of the formation of a callus. A second example of this shell, found at Table Mountain (Natal), at a distance of about 50 miles from Umbogintwini, and at an altitude of fully 2,000 feet above the sea (while the last-named locality is little above sea-level), has the callus, which is almost pure white, in a more advanced state of development, and the labium more triangularly reflexed, and is 23 mm. long by 7 mm. broad. It also has the thin labrum slightly damaged.

## EXPLANATION OF PLATE XVI.

FIGS. 1, 2. *Ena (Pachnodus) McBeaniana*, n.sp.

„ 3, 4. *Curvella Croslyi*, n.sp.

„ 5, 6. *Curvella straminea*, n.sp.

„ 7, 8. *Curvella succinea*, n.sp.

FIG. 9. *Obeliscus Natalensis*, n.sp.

FIGS. 10, 11. *Curvella elevata*, n.sp.